

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION TO THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF I-270 RAMPS AND ROCKLEDGE DRIVE IN MONTGOMERY COUNTY. ROCKLEDGE DRIVE IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION. WORK WILL CONSIST OF THE INSTALLATION OF PASSAGE DETECTORS ON THE I-270 OFF RAMPS AND THE RELOCATION OF A PEDESTRIAN PUSHBUTTON.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA THREE-PHASE, FULLY-ACTUATED MODE WITH A CONCURRENT PEDESTRIAN PHASE ACROSS THE N.B. I-270 OFF RAMP AND AN ALTERNATE PEDESTRIAN PHASE ACROSS THE S.B. I-270 OFF RAMP. THIS PHASING WILL NOT CHANGE.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. INSTALL TWO, FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS INTO EXISTING CONTROLLER CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
9016	2 EA	4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
9009	1 EA	FURNISH AND INSTALL 4 FT. BREAKWAY PEDESTAL POLE
9011	1 EA	FURNISH AND INSTALL PUSHBUTTON AND SIGN
9013	LS	REMOVE AND DISPOSE OF EQUIPMENT
9021	.80 SF	FURNISH AND INSTALL DETECTABLE WARNING SURFACE
9024	1 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
9026	10 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
9030	100 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
9032	620 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
9037	40 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
9042	2 EA	FURNISH AND INSTALL MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN
9045	6 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
9053	1 EA	FURNISH AND INSTALL GROUND ROD - 3/4 IN. X 10 FT.
9058	3000 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
9059	340 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 14 A.W.G.)
9063	440 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
9064	170 LF	FURNISH AND INSTALL SAW CUT FOR LOOP DETECTOR

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
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NONE

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. LEE STARKLOFF
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 513-7318

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

MR. AUGIE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 513-7350

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

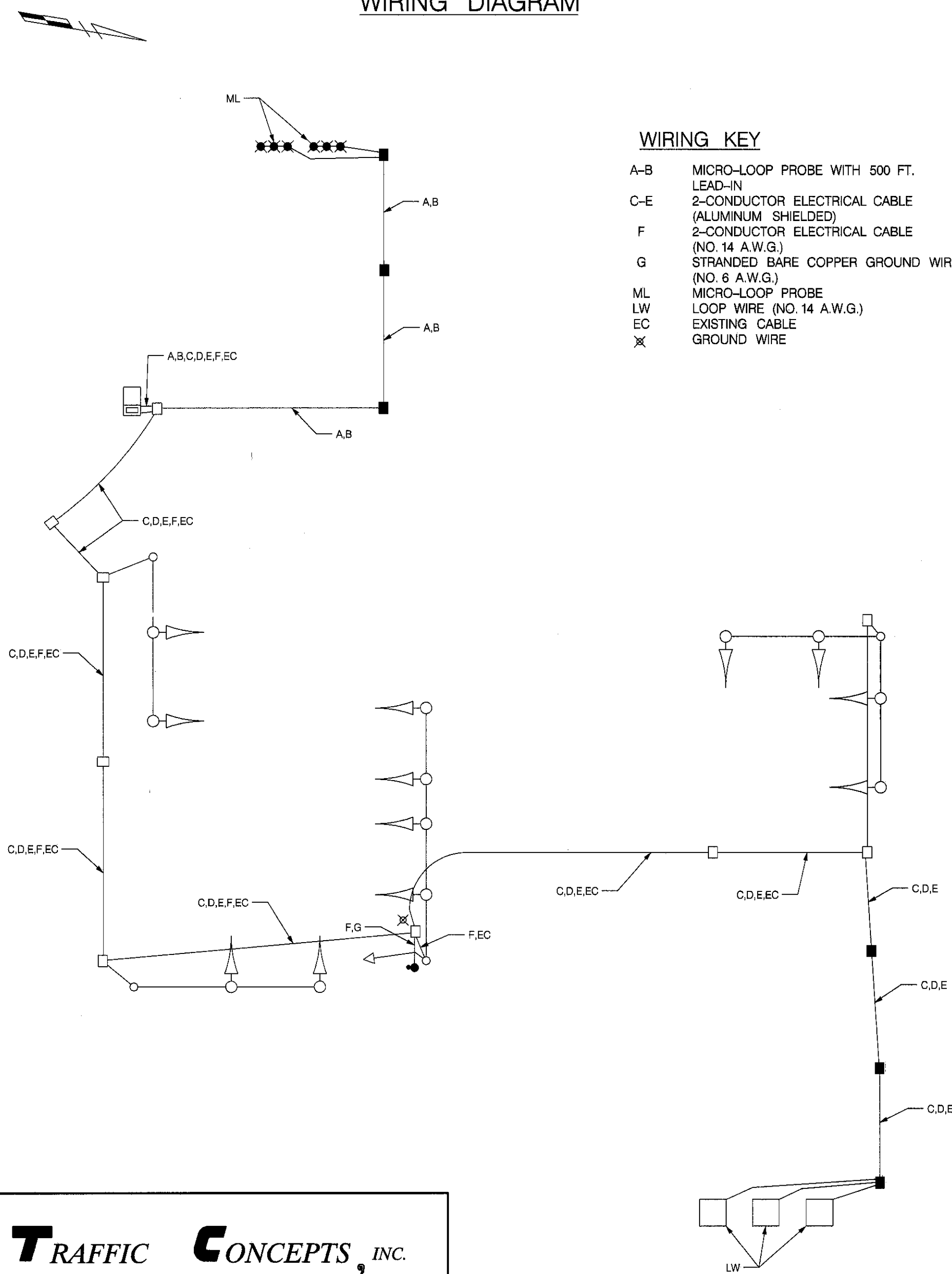
MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

CONTACTS FOR MONTGOMERY COUNTY

DR. WILHELM DERMINASSIAN
TRAFFIC ENGINEERING
(240) 777-8795

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 2 & 5	R	R	-G->-G->-R->-R->	-R->-R->	G	G	R	R	G	G	DW	DW	DW	DW		
2 & 5 CHANGE	R	R	-Y->-Y->-R->-R->	-R->-R->	Y	Y	R	R	Y	Y	DW	DW	DW	DW		
PHASE 2 & 6	G	G	-G->-G->-G->-G->	-G->-G->	G	G	R	R	R	R	WK	WK	DW	DW		
PED CLEAR	G	G	-G->-G->-G->-G->	-G->-G->	G	G	R	R	R	R	FL-DW	FL-DW	DW	DW		
2 & 6 CHANGE	Y	Y	-Y->-Y->-Y->-Y->	-Y->-Y->	Y	Y	R	R	R	R	DW	DW	DW	DW		
PHASE 3	R	R	-R->-R->-R->-R->	-R->-R->	R	R	G	G	R	R	DW	DW	DW	DW		
3 CHANGE	R	R	-R->-R->-R->-R->	-R->-R->	R	R	Y	Y	R	R	DW	DW	DW	DW		
PHASE 4 ALT.	R	R	-R->-R->-R->-R->	-R->-R->	G	G	R	R	G	G	DW	DW	WK	WK		
PED CLEAR	R	R	-R->-R->-R->-R->	-R->-R->	G	G	R	R	G	G	DW	DW	FL-DW	FL-DW		
4 ALT. CHANGE	R	R	-R->-R->-R->-R->	-R->-R->	Y	Y	R	R	Y	Y	DW	DW	DW	DW		
FLASHING OPERATION	FLR	FLR	-FLR->-FLR->-FLR->-FLR->	-FLR->-FLR->	FLY	FLY	FLR	FLR	FLY	FLY	DARK	DARK	DARK	DARK		

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET

I-270 RAMPS AT ROCKLEDGE DR.

SHA# M0409458/652

TOD# AT532-26

DRAWN BY: T. ZAYDEL	F.A.P. NO. NA	TS NO. 3934 A	SHEET NO.
CHECKED BY: K. SCHMID	S.H.A. NO. AT 5825185	T.I.M.S. NO. G 734	
SCALE: 1"=20'	COUNTY: MONTGOMERY		
DATE: 01-27-2005	LOG MILE: 15CR0C00.14		2 OF 2